

*more* phase shift films on a substrate." Applicant's amendments made on March 5, 2007, clearly negate this mischaracterization of the instant invention. That Amendment amended claim 1 to recite "two or more" films. Accordingly, by applying the mischaracterization of "one or more" to the instant invention, the Office Action has improperly applied the combination of cited references.

Applicants also respectfully note that the Office Action rejects only claims 1, 3, 5, 7-12 and 25-34, while seemingly ignoring claims 13-24. Although the Office Action indicates in its remarks that claims 9-25 are product-by-process claims, there is no discussion as to why they have been omitted from the analysis. Moreover, even when analyzed as purely product claims, for the reasons discussed below, instant independent claim 9, and claims 13-24 depending therefrom, would not have been rendered obvious over the cited references. Additionally, instant claim 26 is not specifically rejected in the Office Action although it is an independent claim and recites various features similar to independent claims 1 and 9. Nonetheless, instant claim 26, and claims 27-34 depending therefrom, are patentable over the combined references for all the reasons mentioned herein.

Instant claim 1, from which claims 3, 5 and 7 depend, recites "at least a step of forming *two or more* phase shift films on a substrate." Similarly, claim 9, from which claims 10-25 depend, recites "wherein at *least two or more* phase shift films are formed on a substrate," and instant claim 26, from which claims 27-34 depend, recites "*two or more* layers of phase shift blanks." Additionally, instant claims 1 and 9 each recite

each phase shift film is formed by continuously discharging targets used for forming any one of the layers of the phase shift films without shutdown even when the other layers of the phase shift films are formed, and a composition ratio of metal and silicon in the phase shift film is changed by adjusting discharge powers applied to each target.

The former limitations relating to forming *two or more* layers of a phase shift film reflect an important feature of the claimed invention because each phase shift film is formed with a composition ratio of metal and silicon that changes by adjusting discharge powers applied to each target. The latter limitation of claims 1 and 9 relating to continuously discharging targets advantageously results in fewer defects in forming layers of the phase shift film because the target of the phase shift film is continuously discharged even while the other layers are being formed. Thus, no discharge instability occurs at the beginning or endpoint of the sputtering film formation. Further, film formation components are prevented from proceeding from a discharged target to an undischarged target. See specification at page 52, line 8 to page 53, line 2. Moreover, each layer of the phase shift film thus contains 1-10% of the compositions of adjacent layers due to being discharged without a shutdown; thus, the instant invention features phase shift films as necessarily containing compositions of adjacent layers. See specification at page 53.

In contrast, none of Isao, Angelopoulos, Miyamura or Mitsui recite the aforementioned claimed features. In particular, the combination of references cited does not disclose, nor would it have rendered obvious, forming *two or more* phase shift films on a substrate having a composition ratio of metal and silicon that is changed by adjusting discharge powers applied to *each* target. Additionally none of Isao, Angelopoulos, Miyamura or Mitsui teach or suggest "continuously discharging targets used for forming any one of the layers of the phase shift films without shutdown even when the other layers of the phase shift films are formed," or the corresponding phase shift films that contain compositions of adjacent layers.

For at least the foregoing reasons, instant claims 1, 3, 5, and 7-34 are patentable over Isao in view of Angelopoulos, Miyamura and Mitsui. Reconsideration and withdraw of the rejection are earnestly solicited.

**II. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: June 12, 2007

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